IN THE CLAIMS:

Claims 1-16 stand cancelled.

17. (CURRENTLY AMENDED) A method for generating an immune response to prostate-specific antigen (PSA) in a host, comprising, ~~contacting~~ administering to the host ~~with~~ a sufficient amount of PSA or a cytotoxic T-cell eliciting epitope thereof, and an effective amount of a cytokine or co-stimulatory molecule.

18. (CURRENTLY AMENDED) The method of claim 17, further comprising at least one periodic interval thereafter ~~contacting~~ administering to the host ~~with additional~~ a sufficient amount of additional PSA or a cytotoxic T-cell eliciting epitope thereof to boost the immune response.

19. (CURRENTLY AMENDED) The method of claim 18, wherein the host is administered a boosting amount of ~~contacted with the additional~~ PSA by introducing a pox virus vector to the host having at least one insertion site containing a DNA segment encoding PSA or a cytotoxic T-cell eliciting epitope thereof operably linked to a promoter capable of expression in the host.

20. (ORIGINAL) The method of claim 19, wherein the pox virus is selected from the group of pox viruses consisting of suipox, avipox, capripox and orthopox virus.

21. (ORIGINAL) The method of claim 20, wherein the orthopox virus is vaccinia.

22. (ORIGINAL) The method of claim 20, wherein the avipox is fowlpox, canary pox and pigeon pox.

23. (ORIGINAL) The method of claim 20, wherein the suipox is swinepox.

24. (ORIGINAL) The method of claim 17, wherein the PSA or T-cell eliciting epitope is

formulated with an adjuvant or is in a liposomal formulation.

25. (ORIGINAL) The method of claim 24, wherein the adjuvant is selected from the group consisting of RIBI Detox, QS21 and incomplete Freund's adjuvant.

26. (ORIGINAL) The method of claim 17, wherein the cytokine is selected from the group consisting of IL-2, IL-6 or IL-12.

27. (ORIGINAL) The method of claim 17, wherein the costimulatory molecule is selected from the group consisting of B7.1 or B7.2.

28. (ORIGINAL) The method of claim 18, further comprising contacting the host with additional cytokine or co-stimulatory molecule.

29. (PREVIOUSLY PRESENTED) The method of claim 19, wherein the pox virus vector further contains a DNA encoding a cytokine or a co-stimulatory molecule.